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ABSTRACT

Using case studies and the case method of instruction (CMI) to improve teaching and learning has been reported in the education literature since the early 1900s. Their popularity increased in the 1950s. This paper discusses the effectiveness of using case studies and CMI as instructional strategies. To use CMI, teachers must change their teaching methods and encourage more student participation. Teaching with cases requires much preparation and organization. Not all students may fully grasp the issue that is presented in the case. The research reviewed for this paper suggests that case studies and CMI are effective in higher education and professional education, though the various studies examined show some methodological weaknesses (such as having an all male sample, having a very low response rate, and using a short survey.) Based on this research, the paper concludes that using case studies and CMI may not be the panacea for improving teaching and learning. It recommends more empirical studies conducted in K-16 settings, noting that most of the previous studies were conducted in professional schools. It also recommends that preservice and inservice teachers be trained in the use of CMI. (Contains 18 references.) (SM)

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CASE STUDIES & METHODS IN EDUCATION

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Abstract

Using case studies and the case method of instruction to improve teaching and learning have been reported in the education literature since the early 1900s (e.g., Whipple, 1913). Their popularity increased in the 1950s (e.g., Castore, 1950; Hunt, 1957). The impetus in using these strategies came from Christensen, Hanson, and Moore's (1987) *Teaching and the case method*. Much of the literature relates to the use of these instructional strategies in higher education. Also, based on my review, there is a dearth of data reported on the usefulness of these techniques. Implications for research and practice will be discussed.

CASE STUDIES & METHODS IN EDUCATION

Using case studies and the case method of instruction (CMI) to improve teaching and learning has been reported mostly in the higher and professional education literature since the early 1900s (e.g., Whipple, 1913). Their popularity increased in the 1950s (e.g., Castore, 1950; Hunt, 1957). The impetus in using these strategies came from Christensen and Hanson's (1987) *Teaching and the case method*. Unfortunately, there is an apparent dearth of data reported on the usefulness of these techniques. The purpose of this paper is to discuss the effectiveness of using case studies and the case method as instructional strategies in education.

To use CMI, teachers must change their methods of instruction, such as recitation, to methods, such as modeling, coaching, and scaffolding (e.g., Williams, 1992). Also, Ciardello stated that students would require more activity in the learning process and also more responsibility for their learning. It is assumed that students will develop the critical thinking skills that will be required in the 21st century.

Also, definitions and/or descriptions of cases and case learning need to be explicated. For example, Gideonse (1999) stated that cases are oriented towards practice, are specific, complex, problematic and invited controversy.

On the other hand, case learning is "holistic" and "oblige us to go beyond what we know. They demand we address…what we ought" (Gideonse, 1999, p. 2). Further, it is constructivist in that it involves active learning. Gideonse mentioned that case learning is constructivist for the student and the teacher. Thus, the teacher's instruction is "constructivist".

Gideonse also differentiates case instruction from cases. That is, case instruction is constructivist in its approach to teaching. He stated "The whole purpose behind case instruction is to engage the perceptual, problem identification and analysis, and decision making capacities

of students with the aim of honing those capacities to ever higher states of effectiveness" (p. 3). Further, this type of instruction is very demanding. (See Gideonse [1999] for a description of the five ways this is so; i.e., preparation, delivery of instruction, assessment, training, and resources.)

Sudzina (1999) does note that teaching with cases is not for all educators and that it is not a "panacea" for ineffective teachers or unmotivated students. She stated that case-based teaching works best with flexible and reflective teachers who are facilitators of knowledge.

Several difficulties with teaching with cases are presented by Sudzina. For example, she noted that students seem to enjoy the challenges of cases, but that some students do not quite comprehend the issue or process. This is one of her "Top Ten Reasons for *Not* Using Cases"; (see Sudzina [1999], p.10). She also pointed out that effective teachers were very successful case instructors, which makes sense to the present author.

In addition, Sudzina presents a checklist of factors, which include course content and setting, students, case sources, case selection, teaching strategies and assignments, and assessment that a teacher should consider when organizing for case-based instruction. (See Sudzina [1999], p. 12). It would, therefore, appear that contrary to many educators' beliefs, teaching with cases requires much preparation and organization, and that not all students fully grasp the issue that is presented in the case.

The Literature

Interestingly, Stewart (in press), and Rubin and Roessler (1995) supported the use of cases studies in training rehabilitation counselors. However, Stewart (in press) reported that few cases studies were published in the journals, (e.g., *Rehabilitation Education*), he reviewed for his article.

In addition, Adam (1992) studied 11th grade students and found that their tolerance to other students' viewpoints increased, as well as their sensitivity to their peers (in Ciardello, 1995). However, no academic gains were reported for these students. Although this may be a shortfall of public school studies, as Ciardello (1995) noted, using cases provides an "authentic" learning environment. The research reviewed for this paper suggests that case studies and CMI are effective in higher and professional education, (e.g., Darling, 1995; Hover, 1951; Levin, 1995; Whipple, 1913). However, these papers reported no data to support the authors' recommendations. Several empirical studies have supported the effectiveness of these instructional strategies, (e.g., Castore, 1950; Clark, Koyano, & Nivichanov, 1993; Papaloizos & Stiefel, 1971; Vaughan, DeBiase, & Gibson-Howell, 1998; Watson, 1975); others have not (e.g., Griffith, 1971; Ostlund, 1956). Unfortunately, there were some methodological weaknesses in these studies.

Methodology

For example, Castore (1950) had an all male sample, which may have biased his conclusions. Papaloizos and Stiefel (1971) sent a questionnaire to 207 teachers and had 55 responses; a low 27% response rate. Clark et al. (1993) used computer-assisted instruction in CMI. However, there was one computer available for 65 dental students in the experimental group. This is an obvious shortcoming of the study. Vaughan et al. (1998) sent a nine-item survey addressing CMI to directors of 215 dental hygiene programs. A short survey such as this has implications for the reliability of the survey, and the reliability and validity of the results. Weaknesses in the Watson (1975) study include no script of the topic being used for different sections of the class. Also, only one judge was used "to assure the grading consistency" of

examination scoring (p. 111). This consistency without conducting an inter-rater reliability test may be suspect.

Conclusions

Based upon the research on the use of case studies and CMI, perhaps these strategies are not the panacea for improving teaching and learning. From the research presented in this paper, several implications for research and practice will be discussed.

Implications for Research

First, more empirical studies must be conducted in K-16 educational settings to assist educators in their decision making as to the usefulness of CMI, etc.; considering the fact that many studies have been conducted in professional schools. In fact, few studies were reported in the literature reviewed for this paper on the use of CMI in the elementary grades. Are elementary students not cognitively capable of the problem solving involved in CMI? Second, the research that is conducted should be methodologically sound. As mentioned previously, there were some problems with the methods in the research reported in this paper, (e.g., biased sampling).

Implications for Practice

First, preservice and inservice teachers should be trained in the use of CMI. This training would facilitate the case learning abilities of their students. Second, teachers must remove the "myths" associated with CMI, such as "[l]ittle or no preparation is necessary to with cases" (Sudzina, [1999], p. 10). Third, CMI is not the "panacea" for effective teaching and learning. Many factors influence the effectiveness of CMI, and the literature is also replete with research on effective teaching and effective teachers.

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